

ABSTRACT

A method and system for reducing computation complexity of an MPEG digital video decoder system by scaling down the computation of motion compensation during the decoding process are provided. The video processing system processes incoming MPEG video signals including a plurality of macroblocks with a motion vector associated therewith. A non full-pel vector is converted to a full-pel motion vector on a P frame and a B frame, or on a combination of P and B frames, by rounding an odd number vector to the nearest even number vector. Then, a motion compensated MPEG video picture is performed based on the converted full-pel motion vector. As a result, a substantial computational overhead associated with interpolation is desirably avoided.